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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/563,125

06/26/2006

Tetsuo Nishida

TAM-059

1186

20374 7590 11/16/2009  
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EXAMINER

YOUNG, SHAWQUA

ART UNIT

PAPER NUMBER

1626

MAIL DATE

DELIVERY MODE

11/16/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/563,125	<b>Applicant(s)</b> NISHIDA ET AL.	
	<b>Examiner</b> SHAWQUIA YOUNG	<b>Art Unit</b> 1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 126 and 129-169 is/are pending in the application.
- 4a) Of the above claim(s) 133-169 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 126 and 129-132 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Claims 126 and 129-169 are currently pending in the instant application. Applicants have cancelled claims 127 and 128 in an amendment filed on July 21, 2009. Claims 126 and 129-132 are rejected and claims 133-169 are withdrawn from consideration in this Office Action.

#### **I. *Response to Arguments***

Applicant's amendment, filed July 21, 2009, has overcome the rejection of claims 126 and 127 under 102(e) as being anticipated by Kawasato, et al. (US 20030202316) and the rejection of claims 126-133 as being unpatentable over Kawasato, et al. in view of Matsumoto. The above rejections have been withdrawn.

The Examiner has found prior art which reads on claims 126, 129 and 130 and thus the rejection will be discussed in further detail below.

Applicants have failed to overcome the ODP rejections of claims 126 and 129-132 as being unpatentable over claims 1-4 of copending application no. 11/795,036 or claims 1 and 2 of copending application no. 11/795,030. The above ODP rejections have been maintained.

#### **II. *Rejection(s)***

#### **35 USC § 103 - OBVIOUSNESS REJECTION**

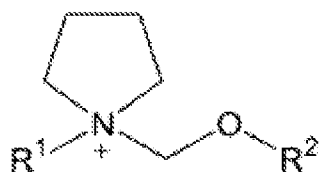
The following is a quotation of 35 U.S.C. § 103(a) that forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

*Graham v. John Deere Co.* set forth the factual inquiries necessary to determine obviousness under 35 U.S.C. § 103(a). See *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). Specifically, the analysis must employ the following factual inquiries:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

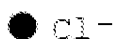
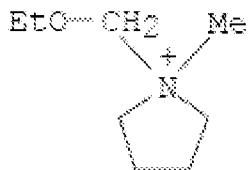
Claims 126 and 129-132 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Pernak, et al.* (See RN 151263-00-2, CAPLUS) in view of *Matsumoto, et al.* The instant invention claims a product with the formula



wherein **R<sup>1</sup>** and **R<sup>2</sup>** are each methyl or ethyl; **X<sup>-</sup>** is BF<sub>4</sub><sup>-</sup> or N(CF<sub>3</sub>SO<sub>2</sub>)<sub>2</sub><sup>-</sup>, provided that R<sup>1</sup> and R<sup>2</sup> are not methyl simultaneously.

**The Scope and Content of the Prior Art (MPEP §2141.01)**

The *Pernak, et al.* reference teaches quaternary ammonium salts such as

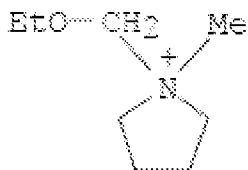


and the antistatic properties of these salts.

The secondary reference *Matsumoto, et al.* teaches various anion groups used in a quaternary ammonium cation. The anions used include  $\text{N}(\text{CF}_3\text{SO}_2)_2^-$ ,  $\text{BF}_4^-$ ,  $\text{PF}_6^-$ , etc. (See page 187)

**The Difference Between the Prior Art and the Claims (MPEP §2141.02)**

The difference between the prior art of *Pernak, et al.* and the instant invention is that there is homologous subject matter. The prior art teaches the specific compound



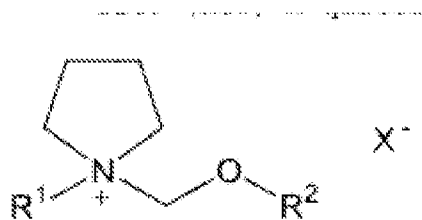
but does not teach the use of a  $\text{N}(\text{CF}_3\text{SO}_2)_2^-$  anion or a  $\text{BF}_4^-$  anion in the quaternary ammonium salts.

The secondary prior art *Matsumoto, et al.* reference teaches the use of a  $\text{N}(\text{CF}_3\text{SO}_2)_2^-$  anion or a  $\text{BF}_4^-$  anion in the quaternary ammonium salts.

Art Unit: 1626

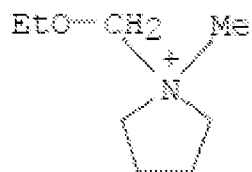
**Prima Facie Obviousness-The Rational and Motivation (MPEP §2142-2413)**

Applicants are claiming a product with the formula



wherein  $R^1$  and  $R^2$  are each methyl or ethyl;  $X^-$  is

$BF_4^-$  or  $N(CF_3SO_2)_2^-$ , provided that  $R^1$  and  $R^2$  are not methyl simultaneously. The prior



art reference of *Pernak, et al.* teaches a similar compound



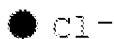
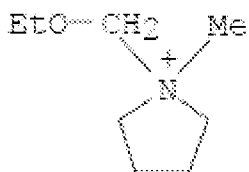
. The

secondary prior art reference teaches the use of  $N(CF_3SO_2)_2^-$  or  $BF_4^-$  as an anion in

quaternary ammonium salts. Therefore, it would have been obvious to combine the two

prior art references and prepare the instant compounds wherein  $R^1$  is methyl and  $R^2$  is

ethyl and  $X^-$  is  $BF_4^-$  or  $N(CF_3SO_2)_2^-$  since the prior art reference teaches this compound



which contains an anion and the secondary prior art reference

Art Unit: 1626

teaches other possible anion groups such as  $N(CF_3SO_2)_2^-$  or  $BF_4^-$  which are commonly used in an electrolyte. A strong prima facie obviousness has been established.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ 2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 126 and 129-132 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of copending Application No. 11/795,036 and claims 1 and 2 of copending Applicants No. 11/795,030. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims 126-132 provide products which are obvious variants with the copending applications' claimed products and provide species in instant claim 127-132 which are obvious over the copending application's claimed invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### **III. *Objections***

#### **Dependent Claim Objections**

Dependent Claims 131 and 132 are also objected to as being dependent upon a rejected based claim. To overcome this objection, Applicant should rewrite said claims in an independent form and include the limitations of the base claim and any intervening claim.



#### **IV. Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawquia Young whose telephone number is 571-272-9043. The examiner can normally be reached on 7:00 AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on 571-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Shawquia Young/

Examiner, Art Unit 1626